

LASER[®]

Part No. 9127

Oil Service Station

70 litre

Instructions



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Introduction

This is a robust, mobile oil management solution designed for efficient oil draining and extraction. This all-in-one unit combines a height-adjustable gravity drain pan, a vacuum extraction measurement reservoir, and a 70-litre waste oil tank into a freestanding, highly manoeuvrable station. Additionally, it includes three integrated storage drawers, two stocked with a 61-piece set of oil filter cup wrenches, adjustable filter wrenches, sump plug adaptors and associated tools for a comprehensive oil service setup.

Oil cup wrench sizes include:

Type	Dia.	Flats	Applications
901	64-65	14	JLR 2.0 ingenium petrol & diesel, Hinckley Triumph models, Honda, Kawasaki, Polaris and Yamaha.
901-1	86-87	16	BMW and Volvo. BMW N20, N40, N42, N45, N46, N52 and S63 engines, also some Volvo S40, S80 and V40.
902	66-67	14	Daihatsu, Lexus, Suzuki and Toyota.
902-2	84	14	Mercedes-Benz V6 and V8 CDI engines with engine code 642-920, Sprinter,
903	73-74	14	Audi, BMW, Citroën, Fiat, Ford, Lancia, Mazda, Mercedes-Benz, Nissan, Opel/Vauxhall 1.0, Peugeot, Porsche, Renault, Suzuki, Toyota and Volkswagen.
903-1	75-76	15	Renault 1.5 DCi engines.
903-2	74	8	Audi, Fiat, Volkswagen.
903-3	73-74	15	Renault 1.5 DCi engines.
903-4	72-73	14	Lexus Previa, Crown, Vios, Toyota Bluebird.
903-6	77	12	Citroën AX, Saxo, Visa Dti, Xantia and ZX, Peugeot 205, 306, 309, 405, 406 and 806, Renault Laguna and Megane 1.5, 1.9, 2.2 and 2.5L DCi engines.
904	78-79	15	Yueda Kia, Rio, Hyundai, Honda, Ford Fiesta, Daihatsu, Mitsubishi, Nissan, Toyota, Suzuki.
905	73	15	Buick, GM, Mitsubishi, Chrysler.
905-1	74-75	14	Audi, BMW, Citroën, Fiat, Ford, Lancia, Mazda, Mercedes-Benz, Nissan, Opel/Vauxhall 1.0, Peugeot, Porsche, Renault, Suzuki, Toyota and Volkswagen.
906	86	18	Alfa Romeo (petrol and diesel), Fiat, Seat, Renault, Mercedes-Benz, Volkswagen.
907	88-89	15	Isuzu, Honda, Mitsubishi.
908	90-91	15	JLR 5.0L petrol engines (from 2010) engine code 508PN - Jag: XK, XF, XJ, XKR, XFR, XJR & F Type - Land Rover: Discovery 4, Range Rover & Range Rover Sport.
909	92-93	15	Audi, General Motors, Nissan, Porsche, Renault, Volkswagen, Volvo. Volkswagen Passat 1.9 TDI, Porsche, Chrysler, Opel, Ford, Renault, Nissan, Mitsubishi, Alfa Romeo, Volvo, MAN canister filters.
910	93-94	15	Audi, General Motors, Nissan, Porsche, Renault, Volkswagen, Volvo. Volkswagen Passat 1.9 TDI, Porsche, Chrysler, Opel, Ford, Renault, Nissan, Mitsubishi, Alfa Romeo, Volvo, MAN canister filters.
911	80	12	Ford, Mazda, Mitsubishi, Daihatsu, Peugeot, Renault, Citroen.
911-1	79-80	15	Fiat Campagnola, Zx Auto, Sunny, Jinbei, Great Wall, Toyota, Mitsubishi, Jeep, Bluebird, Honda, Suzuki, Nissan.
914	101	15	Daihatsu, Mazda, Mitsubishi, Toyota.
915	91-92	15	Audi, General Motors, Nissan, Porsche, Renault, Volkswagen, Volvo. Volkswagen Passat 1.9 TDI, Porsche, Chrysler, Opel, Ford, Renault, Nissan, Mitsubishi, Alfa Romeo, Volvo, MAN canister filters.
809	89	12	Changanstar.
901-C	64-65	14	Most Toyota models fitted with 1800cc and 2000cc engines, including Avenis, Corolla and Prius.
901-L	64-65	14	Toyota applications: Toyota 3.5L V6 (2007 - 2008) and Prius 1.7L (2010). Lexus applications: GS300, IS250 and IS350 (from 2006), ES350, GS350, GS450H, LS460, RX350 (from 2007) and LS600H (from 2008).
902-L	95.5-85.2	16	LYNK & CO.
908-L	91.6	16	HONG QI.
27	27	6	Mercedes-Benz A Class, Renault and Nissan 1.2 DIG-T, 1.5, 1.9, 2.2 and 2.5L DCi, Ford Kuga 2.0L TDCi, Range Rover Evoque 2.2 diesel engines and Vauxhall Corsa 1.2D (2008)
32	32	6	Vauxhall, Opel Astra-G, Corsa-B, Zafira.
36	36	6	BMW 24v petrol and diesel engines, Mercedes-Benz 116 MB engine Vito CDI and Vauxhall/Opel 16v (from 1998), BMW MINI (R56), Ford and Jaguar 2.2 D, Mercedes-Benz 606 and VAG 1.9 SDi (ASY engine code).
5601	86.3	16	BMW and Volvo. BMW N20, N40, N42, N45, N46, N52 and S63 engines, also some Volvo S40, S80 and V40.
5603	74.4	14	Audi, BMW, Citroën, Fiat, Ford, Lancia, Mazda, Mercedes-Benz, Nissan, Opel/Vauxhall 1.0, Peugeot, Porsche, Renault, Suzuki, Toyota and Volkswagen.

Drain plug sizes include:

Plug Type	Size								
Hex	8mm	9mm	10mm	12mm	13mm	14mm	17mm	–	–
Star*	T45	–	–	–	–	–	–	–	–
Spline	M16	–	–	–	–	–	–	–	–
Square (Male)	7mm	8mm	10mm	11mm	12mm	13mm	14mm	5/16"	3/8"
Square (Female)	10mm	–	–	–	–	–	–	–	–
Triangle	10mm	–	–	–	–	–	–	–	–

Also includes: 155mm sliding T-bar, 78mm & 153mm extensions (all 3/8"D); 253mm L-shape socket wrench, 126 & 254mm extensions (all 1/2"D); 255mm x 22mm Bi-Hex (12pt) spanner; 65-85 & 80-100mm oil filter grip wrenches.

Cups use with 1/2"D socketry or a 22mm spanner. Drain plugs use with 3/8"D socketry.

Components

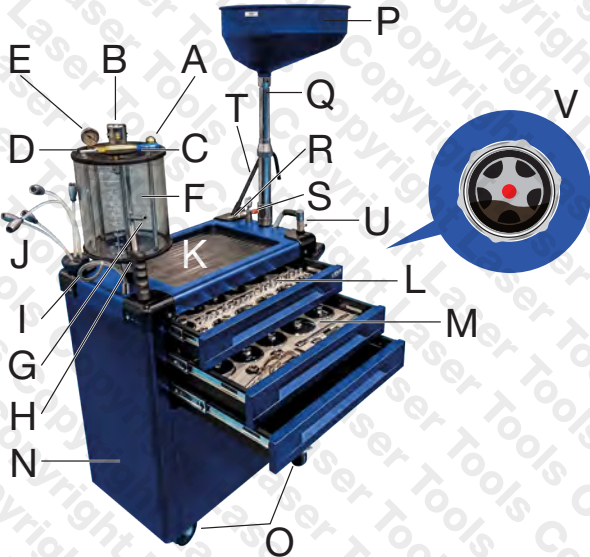


Fig 1

Ref.	Description
A	Reservoir safety valve
B	Reservoir sealing valve
C	Air inlet silencer
D	Compressed air inlet
E	Vacuum pressure gauge
F	Vacuum extraction measurement reservoir
G	Oil extraction hose
H	Oil extraction ON/OFF valve
I	Oil hose (transparent)
J	Oil suction tubes (5 x 700mm)
K	Tool tray
L	Oil filter cup wrench set
M	Oil filter cup wrench set
N	Waste oil tank (internal)
O	Castors
P	Gravity oil drain pan
Q	Drain pan adjustable post
R	Waste tank air inlet
S	Safety valve
T	Waste oil discharge hose
U	Waste oil discharge ON/OFF valve
V	Waste tank sight window

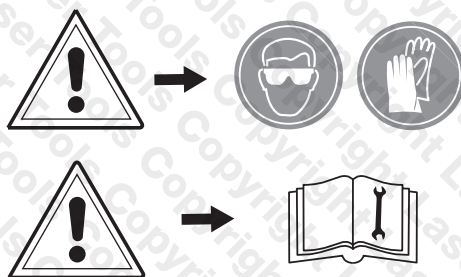
Specifications

Waste oil tank with sight glass:	70 litres
Gravity drain pan:	10 litres
Vacuum oil extraction measuring reservoir:	10 litres
Workshop compressed air supply:	Up to 110psi / 8bar
Air consumption:	150 l/min
Vacuum:	0 - 65cmHg
Working oil temperature:	40° - 80°C
Oil Suction Tubes (5 x 700mm tubes):	
1 x 5mm Ø - rate of pumping:	1.9 l/min
2 x 6mm Ø - rate of pumping:	3.7 l/min
2 x 8mm Ø - rate of pumping:	6.5 l/min
Minimum working height:	1440mm

Instructions

Installation:

- Attach castors.
- Mount the vacuum extraction measurement reservoir (**F**) onto main unit and turn clockwise until it is fully seated. Then attach transparent hose (**I**) to the reservoir.
- Mount the drain pan adjustable post (**Q**) onto main unit and turn clockwise until it is fully seated. Fit the oil drain pan (**P**) onto post (**Q**) and turn clockwise until it is fully seated. Turn the locking ring clockwise to lock in position, anti-clockwise to release for adjustment.
- Attach pressure gauge.



Instructions

Operation:

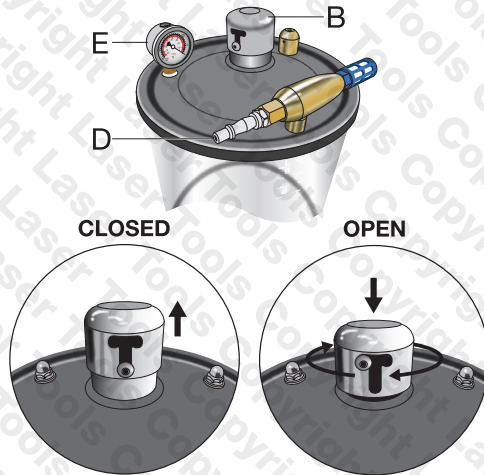


Fig 2

1) Extracting oil through dipstick tube (vacuum extraction):

1. Refer to Figure 2: Close the vacuum extraction measurement reservoir sealing valve (B) by pressing down and rotating the valve to the centre slot position; release to let valve spring up to the closed position.

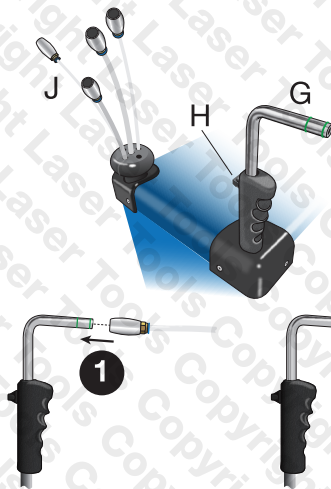


Fig 3

2. Refer to Figure 3: On the oil extraction hose attachment (G), ensure the ON/OFF valve (H) is in the OFF position.

Instructions

3. Choose an oil suction tube (**J**) that is a suitable diameter for the vehicle dip stick tube and attach it to the oil extraction hose attachment (**G**). Then insert the oil suction tube into the vehicle's dip stick tube.
4. Attach the compressed air source to the compressed air inlet (**D**) on top of the reservoir — the vacuum generated will register on the pressure gauge (**E**).
5. Open the ON/OFF valve (**H**) on the oil extraction hose attachment (**G**) to extract the oil into the reservoir.
6. When the extraction process is finished, note the amount of oil extracted before opening the reservoir sealing valve (**B**) to purge the reservoir contents into the waste oil tank.

Note:

- Do not overfill reservoir — stop the extraction process if the oil level reaches the STOP indication on the side of the reservoir, then purge the oil into the waste oil tank before resuming extraction.
- Leave the reservoir sealing valve (**B**) open when oil extraction process is finished.
- Do not extract oil if the oil temperature is over 80°C.

2) Gravity oil drain procedure:

1. Raise vehicle to suitable height (two or four-post lift) and move the oil service station into position under the engine or gearbox oil drain plug. Adjust the height of the drain pan adjustable post (**Q**) to avoid spillage. Turn the locking ring clockwise to lock in position.
2. Unscrew and remove the drain plug and let the oil drain into the oil drain pan (**P**). The oil will drain into the waste oil tank.

3) Emptying the waste oil tank:

Note:

Do not overfill the waste oil tank: Drain the waste oil when the oil becomes visible in the observation window (**V**).

1. Mount the waste oil discharge hose (**T**) into, or over a suitable waste oil container.
2. Refer to Figure 2: Close the vacuum extraction measurement reservoir sealing valve (**B**) by pressing down and rotating the valve to the centre slot position; release to let valve spring up to the closed position.
3. Refer to Figure 1: Close waste oil discharge ON/OFF valve (**U**). Close the waste tank air inlet ON/OFF valve (**R**).
4. Attach the compressed air source to the waste tank air inlet.

Instructions

5. Open the waste tank air inlet ON/OFF valve (**R**), to pressurise the waste oil tank. The safety valve (**S**) will operate as the pressure increases. **Note: Do not pressurise the tank continuously:** When pressurising the tank, you must fully open the air inlet ON/OFF valve (do not half-open it). Once there is sufficient pressure in the tank, the safety check valve will automatically pop up and close. The entire process takes 1 to 2 seconds. **Immediately close the air inlet valve to stop further pressurisation. DO NOT exceed 0.2MPa (43 psi) when purging the waste tank.** See gauge (**R**).
6. With the waste oil discharge hose (**T**) mounted in or over a suitable waste oil container, open the waste oil discharge ON/OFF valve (**U**) to discharge the waste oil.
7. After discharge is complete, disconnect the compressed air supply and release tank pressure by opening waste tank air inlet ON/OFF valve (**R**).
8. Open the vacuum extraction measurement reservoir sealing valve (**B**) and leave open for subsequent storage of the unit.
9. Dispose of waste oil according to government and local authority guidelines.

Precautions (continued overleaf):

- Read and understand these instructions including all safety precautions before using the oil service station. Keep these instructions with the machine.
- Wear eye protection and appropriate personal protection equipment.
- Refer to the vehicle manufacturer's documentation for the correct procedure.
- Visually inspect all equipment before use for signs of damage or wear and tear. Any defective or suspect equipment should be repaired or replaced before use.
- The oil service station must be connected to a suitable, clean, dry and lubricated workshop compressed air supply. Water in the air line will damage the machine. Drain the workshop compressor air tank daily and drain any dryer/filter unit when necessary.
- Compressed air supply must maintain a stable 7 bar+ pressure.
- **Do not overfill the waste tank:** Drain the waste oil when the oil becomes visible in the observation window.
- Do not discharge waste oil while the waste tank air inlet ON/OFF valve (**R**) is OPEN. When emptying the waste oil tank, **do not pressurise the tank continuously:** when pressurising the tank, you must fully open the air inlet valve (do not half-open it). Once there is sufficient pressure in the tank, the check valve will automatically pop up and close. The entire process takes 1 to 2 seconds. **Immediately close the air inlet valve to stop further pressurisation.** Then discharge the waste oil.
- Not to be used to drain petrol, diesel or any flammable liquids.

Precautions (continued):

- Do not use these tools for any purpose other than that for which they have been designed.
- When finished, account for all tools and parts being used.
- Maintain the tools and the oil service station in good and clean condition and always store in a secure and dry area.
- Dispose of waste oil according to government and local authority guidelines.

Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by the Tool Connection for incorrect use of any of our products, and the Tool Connection cannot be held responsible for any damage to personnel, property or equipment when using the tools. Incorrect use will also invalidate the warranty.

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When you have finished with this toolset please recycle it

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